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(54) Title: METHODS AND COMPOSITIONS FOR DIAGNOSIS AND TREATMENT OF B CELL CHRONIC LYMPHOCYTIC LEUKEMIA

(57) Abstract: Provided are isolated and purified preparations of a combination of a light chain antibody gene and a heavy chain antibody gene, where the light chain and heavy chain antibody genes are the same among more than one patient with B cell chronic lymphocytic leukemia (B-CLL). Vectors comprising those genes and cells comprising those vectors are also provided, as are isolated and purified antibodies encoded by the antibody genes. Anti-idiotypic antibodies, peptides, and aptamers that bind to the antigen-binding region of an antibody encoded by the antibody genes are additionally provided, as are multimeric molecules comprising multiple binding sites that bind to the antigen-binding region of an antibody encoded by the antibody genes. Methods of determining whether a patient with B cell chronic lymphocytic leukemia (B-CLL) has a form of B-CLL that is susceptible to treatment directed to eliminating idiotype specific B cell receptor-bearing B-CLL cells are also provided, as are methods of following the progression of treatment of B-CLL in the patient. Additionally, methods of treating a patient having B-CLL are provided, as are methods of identifying a therapeutic agent for B-CLL.

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